

SAN FRANCISCO, CA 94111

#### United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/437,078 11/09/1999 DANIEL L. AUCLAIR 7501 27869 7590 02/12/2002 SKJERVEN MORRILL MACPHERSON LLP EXAMINER THREE EMBARCADERO CENTER MOISE, EMMANUEL LIONEL 28TH FLOOR

ART UNIT PAPER NUMBER

2133 DATE MAILED: 02/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Applicant(s) Application No. 09/437,078

Auclair et al.

Office Action Summary

Examiner

**Emmanuel L. Moise** 

Art Unit 2133



The MAILING DATE of this communication appears on the cover sheet with the correspondence address	
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET THE MAILING DATE OF THIS COMMUNICATION.	
<ul> <li>THE MAILING DATE OF THIS COMMONICATION.</li> <li>Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this</li> </ul>	
communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).	
Status  1) ☒ Responsive to communication(s) filed on Oct 2, 2001	
,	
2a) ☑ This action is <b>FINAL</b> . 2b) ☐ This action	
3) Since this application is in condition for allowance exc closed in accordance with the practice under Ex part	ept for formal matters, prosecution as to the ments is the Quay/1835 C.D. 11; 453 O.G. 213.
Disposition of Claims	inforce pending in the applica
4) ☑ Claim(s) <u>37 and 39-45</u>	is/are pending in the applica
4a) Of the above, claim(s)	is/are withdrawn from considera
5)  Claim(s)	is/are allowed.
6) ☑ Claim(s)	is/are rejected.
6)  X  Claim(s) 37 and 39-45	is/are objected to.
7)	is/are objected to.
8) Claims	are subject to restriction and/or election requirem
Application Papers	
The specification is objected to by the Examiner.	·
10\\ The drawing(s) filed onis/ar	e objected to by the Examiner.
11) The proposed drawing correction filed on	is: a∏ approved b)□disapproved.
12)☐ The oath or declaration is objected to by the Examine	r.
Priority under 35 U.S.C. § 119	27 L 2 2 2 440(a) (d)
13) Acknowledgement is made of a claim for foreign prior	rity under 35 U.S.C. § T19(a)-(a).
a) ☐ All b) ☐ Some* c) ☐None of:	
1. Certified copies of the priority documents have been received.	
Certified copies of the priority documents have I	peen received in Application No.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).	
*See the attached detailed Office action for a list of the certified copies not received.	
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).	
Attachment(s)	The state of the s
15) Notice of References Cited (PTO-892)	18) Interview Summary (PTO-413) Paper No(s).
16) Notice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Informal Patent Application (PTO-152)
17) Information Disclosure Statement(s) (PTO-1449) Paper No(s).	20) Other:

Page 2

Application/Control Number: 09/437,878

Art Unit: 2133

### Response to Amendment

- 1. This Office action is responsive to applicant's correspondence filed on October 2, 2001. Claims 37 and 39-45 are pending.
- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

# Claim Rejections - 35 USC § 112

3. Claims 37 and 39-45 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claimed subject matter in question is the step of "programming the memory cell until the charge of the memory cell is above the programmed-cell reference level."

Please see Section #3 of the previous Office action.

## Response to Arguments

4. Applicant basically argues that the step of "programming the memory cell ..." is identified with step 905 of Figure 9 of the present application.

Application/Control Number: 09/437,878 Page 3

Art Unit: 2133

5. The Examiner continues to disagree. Step 5 of Figure 9 does not provide support for the claimed step of "programming the memory cell until the charge of the memory cell is above the programmed-cell reference level." In step 901 of Figure 9 of the present application, a first control voltage, which is higher than the voltage for a normal read operation, is applied; and in step 903, a second control voltage, which is lower than a normal read operation, is applied. The cells are read in steps 902 and 904 to see if there is any error as determined by an ECC check. Steps 901-902 and 903-903 are performed to verify that the "1"s and the "0"s, respectively, in the chosen sector of cells are unaffected by the program operation. As can be seen, no step in Figure 9 provides a proper antecedent support for the claimed language of "programming the memory cell until the charge of the memory cell is above the programmed-cell reference level."

Applicant also refers to Figure 8 described between page 23, line 6 and page 24, line 23, as providing support for the claimed language in question. The Examiner disagrees. Careful review of steps 801-803 of Figure 8 does not lead to the conclusion that Figure 8 provides a proper antecedent support for the step of "programming the memory cell until the charge of the memory cell is above the programmed-cell reference level." In Figure 8, a check is performed to see if all cells are written correctly under the control of an applied voltage, and if the data are read correctly, a program verify operation is considered to have been successfully. This is different from the claimed language in question.

Application/Control Number: 09/437,878

Art Unit: 2133

#### Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel L. Moise whose telephone number is (703)305-9763. The examiner can normally be reached on Monday - Friday from 08:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady, can be reached on (703)305-9595. Any response to this action should be mailed to: Commissioner of Patents and Trademarks Washington, D.C. 20231, or faxed to: (703) 746-7239, (for formal communications intended for entry), Or: (703) 746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Application/Control Number: 09/437,878

Art Unit: 2133

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Emmanuel L. Moise

Primary Patent Examiner

Art Unit 2133

February 8, 2002